

***PRENANTHES ASPERA* (ASTERACEAE: CICHORIEAE): NEW TO TEXAS**

JASON R. SINGHURST

Wildlife Diversity Program
Texas Parks and Wildlife Department
4200 Smith School Road, Austin, Texas 78704
jason.singhurst@tpwd.state.tx.us

WALTER C. HOLMES

Department of Biology
Baylor University, Waco, Texas 76798-7388
walter_holmes@baylor.edu

ABSTRACT

Prenanthes aspera is reported as new to the native Texas flora — it has been discovered in a calcareous, open, pimple mound woodland and prairie in Bowie County. A key to the four species of *Prenanthes* occurring in the state and a distribution map are included.

KEY WORDS: *Prenanthes*, Asteraceae, Cichorieae, Texas.

On 8 May 2008, the authors discovered in Bowie Co., Texas, basal leaves of a plant that appeared to be an unknown (for the state) species of *Prenanthes*. It was not matched with any of the three known species because of differences in shape and/or distribution. The rootstock was collected and transplanted to the garden of the senior author in Austin. The plant flowered in 2010 and was identified as *P. aspera* Michaux, which is here reported as new to the state.

Specimen citation. Texas. [specimen grown in garden of J.R. Singhurst in Austin, Travis Co., collected 30 Sep 2010, *Singhurst 18337* (BAYLU); from a rootstock collected in] **Bowie Co.:** 0.9 mi. south of Dalby Springs, west side of US Hwy 59 at junction of FM 561; calcareous open pimple mound woodland and prairie with *Quercus stellata*, *Carya texana*, *Fraxinus americana*, *Schizachyrium scoparium*, *Liatris squarrulosa*, *Platanthera lacera*, *Helianthus mollis*, *Silphium integrifolium*, and *Rudbeckia triloba*; mesic woodland species on tops and bases of mounds with intermittent opening between mounds, 8 May 2008, *J.R. Singhurst and W.C. Holmes* (not numbered at time of collection).

Prenanthes aspera is a tallgrass prairie species that is known from the western Appalachian area, westward to the limits of the tallgrass prairies (Oklahoma, Kansas, Nebraska), south to Georgia and Texas (excluding Alabama) and north to South Dakota, Minnesota, Ohio, and Pennsylvania (Bogler 2006). Although mentioned as being in Louisiana by Small (1933), Cronquist (1980), and Bogler (2006), the location in that state is unknown (Gandhi & Thomas 1989; Thomas & Allen 1996). The species is rare or endangered in some states (Bogler 2006). In Texas, the species is best considered native and a rare peripheral species.

In 2004, Singhurst et al. published a taxonomic treatment of *Prenanthes* in Texas in which three species were reported, with *P. carrii* Singhurst, O'Kennon, and W.C. Holmes being proposed as new. Following is a key, adapted from that work, to the four species of *Prenanthes* currently known to occur in Texas.

KEY TO THE SPECIES OF *PRENANTHES* IN TEXAS

1. Capitula 5–6 flowered; involucre with 5 (–6) principal phyllaries, glabrous ***Prenanthes altissima***
 1. Capitula 10–15 flowered; involucre with 6–8 principal phyllaries, pubescent with long, coarse hairs.
2. Midstem leaves sessile to clasping ***Prenanthes aspera***
 2. Midstem leaves petiolate.
3. Lower and midstem leaves shallowly or deeply pinnately lobed, the upper lanceolate to oblong; petioles usually shorter than the blades; capitulescence racemose to slightly paniculate ***Prenanthes barbata***
 3. Lower and midstem leaves sagittiform, the upper ovate to triangular-deltate; petioles usually longer than the blades, capitulescence paniculate ***Prenanthes carrii***

Figure 1 is a photograph of the species as it appeared in the garden at the time of collection. Figure 2 shows the county-level distribution of the genus by species within the state.

LITERATURE CITED

- Bogler, D.J. 2006. *Prenanthes* In: Flora of North America Editorial Committee, Flora of North America, Vol. 19. Magnoliophyta: Asteridae, part 6: Asteraceae, part 1. pp. 264–271.
- Cronquist, A. 1980. Vascular Flora of the Southeastern United States. Vol. 1, Asteraceae. Univ. of North Carolina Press, Chapel Hill.
- Gandhi, K.N. and R.D. Thomas. 1989. Asteraceae of Louisiana. Sida, Bot. Misc. 4: I–xii, 1–202.
- Singhurst, J.R., R.J. O’Kennon, and W.C. Holmes. 2004. The genus *Prenanthes* (Asteraceae: Tribe Cichorieae) in Texas. Sida 21: 181–191.
- Small, J.K. 1933. Manual of the Southeastern Flora. Univ. of North Carolina Press, Chapel Hill.
- Thomas, R.D. and C.M. Allen. 1996. Atlas of the Vascular Flora of Louisiana. Louisiana Dept. of Wildlife and Fisheries Natural heritage Program, Baton Rouge.



Figure 1. *Prenanthes aspera* (Singhurst 18337, BAYLU), garden grown from collection in Bowie County. Photograph by Singhurst.



Figure 2. *Prenanthes aspera* (Singhurst 18337, BAYLU). Part of the photo in Figure 1.

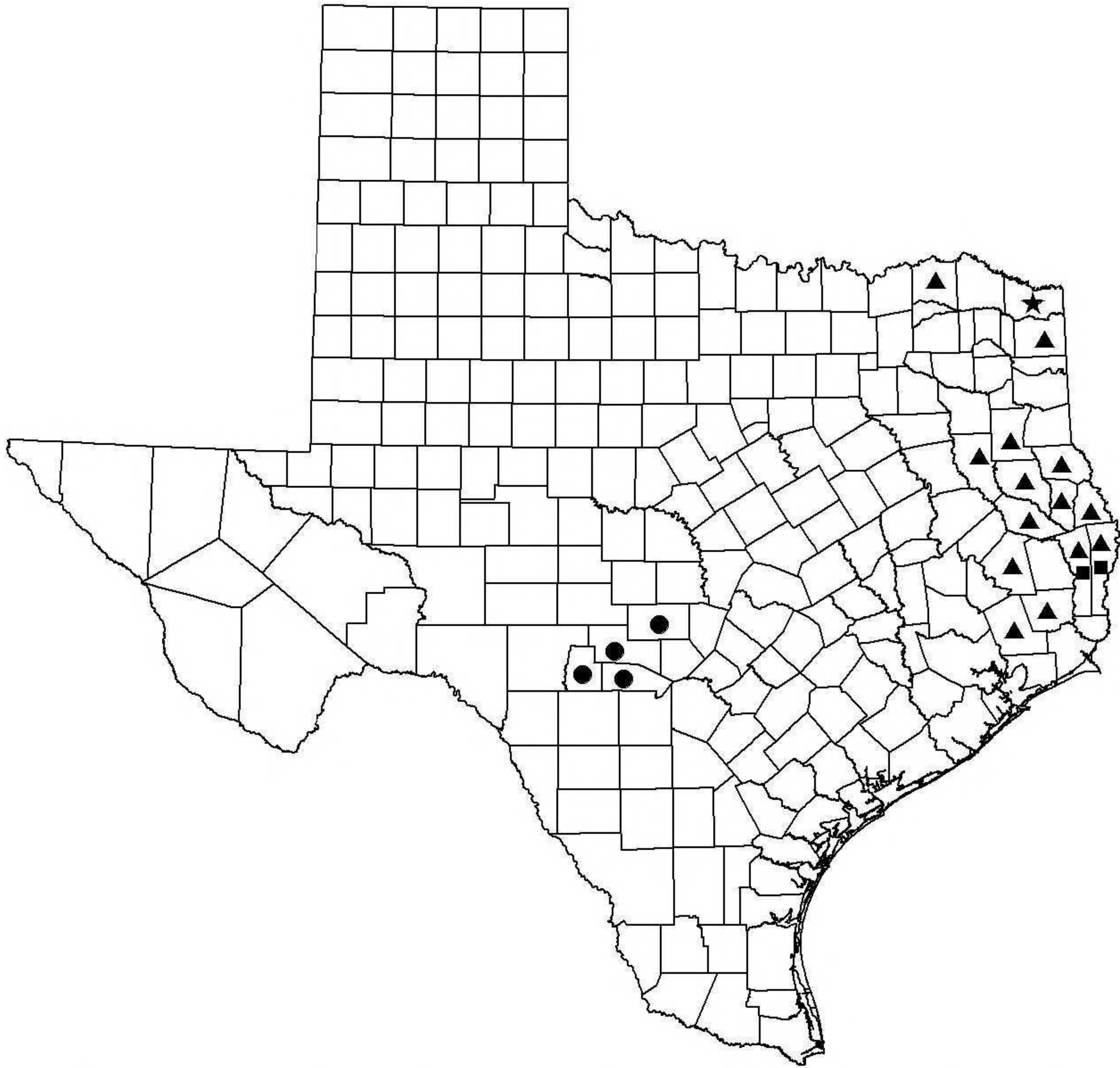


Figure 3. Distribution of *Prenanthes* in Texas. Filled circles *P. carrii*; triangles *P. barbata* (Torrey & A. Gray) Milstead ex Cronquist; squares *P. altissima* L.; and star *P. aspera*. Modified from Singhurst et al. (2004).